



## List 5190 - A Brand AD-LDS

### General Drilling Operations

Work Material	Carbon Steels, Mild Steels 1010, 1050, 12L14		Alloy Steels 4140, 4130		Cast Iron		Cast Aluminum Alloy		Special Alloy Steels, Hardened Steels				
									26-30 HRC		30-34 HRC		
Hardness	200-260 SFM		100-165 SFM		200-325 SFM		260-525 SFM		65-90 SFM		50-75 SFM		
Drilling Speed	Speed RPM		Feed IPR		Speed RPM		Feed IPR		Speed RPM		Feed IPR		
	mm	inch	RPM	IPR	RPM	IPR	RPM	IPR	RPM	IPR	RPM	IPR	
0.5	-	25,000	0.0002-0.0008	25,000	0.0002-0.0008	25,000	0.0002-0.0006	25,000	0.0008-0.0020	15,000	0.0002-0.0008	12,000	0.0002-0.0008
1.0	-	22,300	0.0004-0.0012	12,600	0.0004-0.0012	25,000	0.0004-0.0012	25,000	0.001-0.004	7,500	0.0004-0.0012	6,000	0.0004-0.0012
2.0	-	11,000	0.001-0.002	6,300	0.001-0.002	12,500	0.001-0.002	19,150	0.002-0.008	3,800	0.001-0.002	3,000	0.001-0.002
3.0	-	7,500	0.001-0.003	4,200	0.001-0.003	8,400	0.002-0.003	12,600	0.004-0.009	2,500	0.001-0.003	2,000	0.001-0.003
4.0	-	5,700	0.002-0.004	3,150	0.002-0.004	6,300	0.003-0.005	9,500	0.005-0.010	1,900	0.002-0.004	1,500	0.002-0.004
6.0	-	3,800	0.002-0.005	2,100	0.002-0.005	4,200	0.005-0.007	6,300	0.005-0.011	1,250	0.002-0.005	1,000	0.002-0.005
-	1/4	3,500	0.002-0.005	2,030	0.002-0.005	4,000	0.005-0.007	6,000	0.005-0.011	1,180	0.002-0.005	950	0.002-0.005
8.0	-	2,800	0.003-0.006	1,575	0.003-0.006	3,200	0.005-0.008	4,730	0.007-0.012	940	0.003-0.006	750	0.003-0.006
-	3/8	2,340	0.004-0.007	1,350	0.004-0.007	2,670	0.007-0.010	4,000	0.009-0.014	785	0.004-0.007	630	0.004-0.007
10.0	-	2,300	0.004-0.007	1,250	0.004-0.007	2,500	0.007-0.010	3,800	0.009-0.014	750	0.004-0.007	600	0.004-0.007
12.0	-	1,900	0.005-0.008	1,050	0.005-0.008	2,100	0.008-0.012	3,150	0.010-0.016	625	0.005-0.008	500	0.005-0.008
-	1/2	1,760	0.005-0.008	1,000	0.005-0.008	2,000	0.008-0.012	3,000	0.010-0.016	590	0.005-0.008	470	0.005-0.008
-	5/8	1,400	0.006-0.011	800	0.006-0.011	1,600	0.009-0.013	3,400	0.012-0.019	470	0.006-0.011	380	0.006-0.011
16.0	-	1,400	0.006-0.011	800	0.006-0.011	1,600	0.009-0.013	2,400	0.012-0.019	470	0.006-0.011	380	0.006-0.011
-	3/4	1,170	0.008-0.013	680	0.008-0.013	1,330	0.010-0.016	2,000	0.016-0.024	390	0.008-0.013	315	0.008-0.013
20.0	-	1,150	0.008-0.013	630	0.008-0.013	1,300	0.010-0.016	1,900	0.016-0.024	375	0.008-0.013	300	0.008-0.013
25.0	-	900	0.010-0.018	500	0.010-0.018	1,000	0.012-0.019	1,500	0.020-0.030	300	0.010-0.018	240	0.010-0.018

1. The indicated speeds and feeds are for drilling with water soluble oil.
2. When using non-water soluble oil, reduce the drilling speed by 20%.
3. When centering on a curved or inclined surface, reduce the feed rate accordingly.
4. For machines that cannot achieve the speeds indicated in the table, please set rotation as high as possible.

ABOUT OSG

DRILLING

THREADING

MILLING

HOLDERS

INDEX

